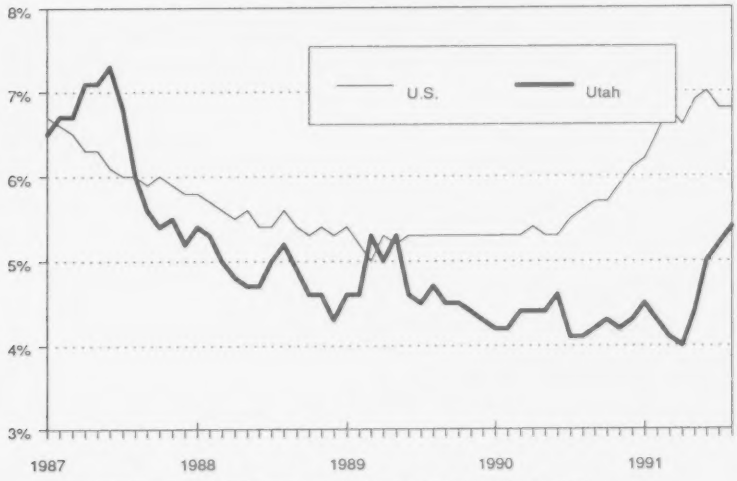
Utah Labor Market Report

August 1991
Volume 1, No. 8

Seasonally Adjusted Unemployment Rates



Source: Utah Department of Employment Security, Labor Market Information Services.

Joblessness in Utah continued to rise in August—But September should bring better economic news

Job growth—often a better indicator of economic health than unemployment rates—remained strong in August.

Utah joblessness increased two-tenths of a point to rest at 5.4 percent in August. As in the past several months, entrants to Utah's labor force—not layoffs—have provided the primary impetus for rising unemployment. Since May 1991, joblessness in the State has risen a full percentage point. Evidently, people are coming to Utah to take advantage of our relatively strong economy. We have received national recognition over the past several months publicizing Utah as one of the top job producing states in the nation. Hence, market forces seem to be working to attract workers from depressed regions to our area.

Although Utah unemployment has risen steadily over the past four months, the State's jobless rate still falls almost a point and a half below the national average. Roughly 43,800 Utahns were out of work in August—a third more than a year ago. As a result, the jobless rate has increased 1.3 percentage points since August 1990.

The State is still generating jobs at a moderate rate. Our continued strong employment expansion is one of the brightest economic notes. Utah has created 25,100 net new jobs since August of last year. While employment expansion in the State is slightly slower than during the first half of the year, Utah is still managing a moderate 3.5 percent 12-month growth rate. This increase seems truly remarkable in light of a listless national recovery and Utah's past history of following the national trends. The nation is still losing jobs despite a slight economic upturn.

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THE RATE *(Seasonally Adjusted)*

Aug 1991	Utah	5.4%	U.S.	6.8%
Jul 1991	Utah	5.2%	U.S.	6.8%
Aug 1990	Utah	4.1%	U.S.	5.6%

NONFARM JOBS *(% change from a year ago)*

Aug 1991	Utah	3.5%	U.S.	-1.2%

CPI-U *(Base Year 1982-84 = 100)*

Jul 1991	U.S.	136.2	Yr-over chng	4.4%

PPI *(Base Year 1982-84 = 100)*

Jul 1991	U.S.	116.3	Yr-over chng	1.7%

We still expect that, overall, Utah will elude this recession—even though several industries will not escape unscathed. Manufacturing, mining, federal government, air transportation, and utilities are all experiencing slow or negative employment growth. However, other industries have generated enough positions to keep Utah out of any serious economic trouble.

A boom in construction has pushed jobs up nearly 9 percent since August 1990. The 2,700 new jobs created in this industry provide a pleasant departure from the usual recessionary pattern. Here in Utah, the construction industry has the highest growth rate of any major industry.

Nevertheless, the service industry continues to generate the largest *number* of Utah jobs. Over the past 12 months, services created 11,100 net new positions—44 percent of the State total. With a growth rate of 6 percent, services are continuing their 80s trend.

After several years of slow growth, finance/insurance/real estate made a strong showing with 1,600 new jobs. Employment in this industry is up almost 5 percent with nonbanking enterprises making the longest strides.

Trade and government experienced more temperate growth. Trade employment expansion moderated to 3 percent. Cuts in defense-related employment continue to curb growth in government. Utah has lost 1,700 federal jobs over the past 12 months, but growth in state and local governments more than offset these losses.

Declines in utility employment inhibited expansion in transportation/communications/utilities. This industry has added 600 new jobs since August 1990 for a growth rate of 1 percent.

As is typically the case, manufacturing and mining have been hardest hit by the national malaise. However, while mining employment is down 200 jobs, manufacturing is still holding its own with a 1.4 percent growth rate. The fact that Utah's manufacturing sector has continued to generate jobs is an exceptional feat.

Continued strong job growth and an improving national economy should help push Utah unemployment down next month. We expect the State will finish the year in a strong economic stance.❐

Lecia Parks Langston
Chief Economist

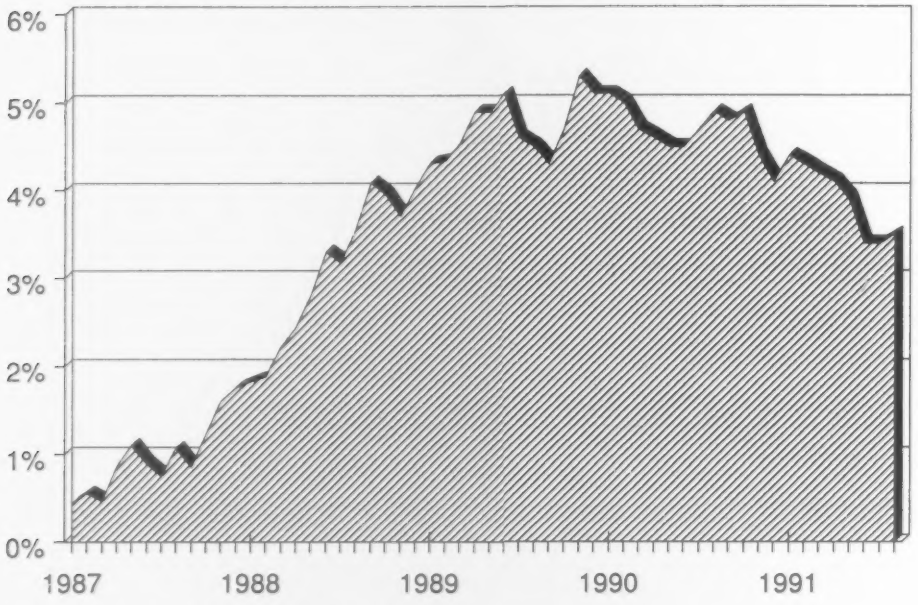
■ ***Utah continues as one of the top job producers in the nation with a year-over nonfarm job growth rate of 3.5 percent—25,100 jobs.***

■ ***Utah's unemployment rate rose two-tenths of a point to 5.4 percent.***

■ ***As in the past several months, the increase in joblessness came primarily from an increase in the number of individuals who entered the labor force—not layoffs.***

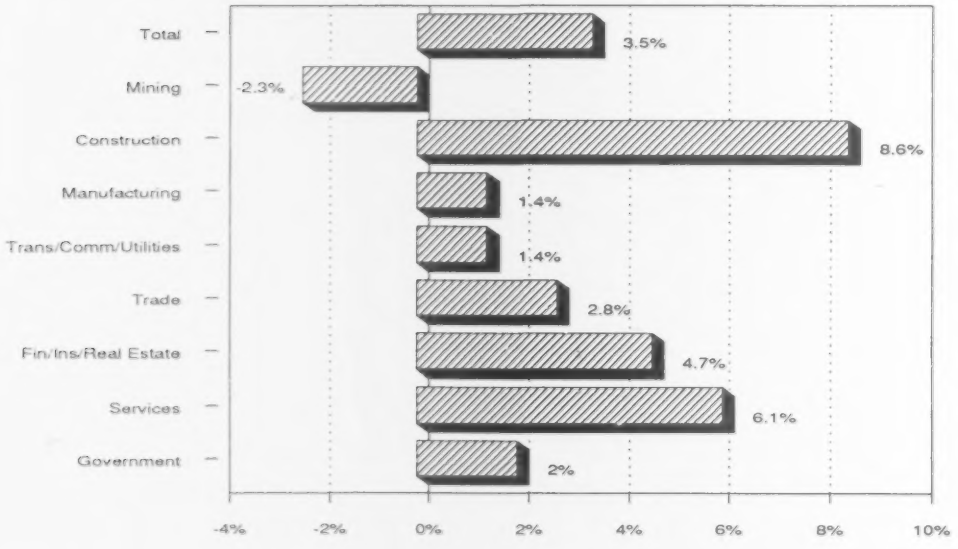
■ ***With 9 percent expansion, construction was the fastest growing Utah industry between August 1990 and August 1991.***

Year-Over Percent Change in Utah Nonfarm Jobs



Source: Utah Department of Employment Security, Labor Market Information Services.

August 1990-91 Percent Growth In Utah Nonfarm Jobs by Industry



Source: Utah Department of Employment Security, Labor Market Information Services.

RAW

Table 1. Utah Civilian Labor Force and Nonagricultural Jobs, Not Seasonally Adjusted *(Numbers in Thousands)*

	Aug 1991(f)	Aug 1990	Percent Change	Jul 1991(p)	Jun 1991(r)
CIVILIAN LABOR FORCE	**812.5**	**797.1**	**1.9**	**805.8**	**804.8**
Employed	**770.1**	**764.2**	**0.8**	**765.8**	**766.8**
Unemployed	**42.4**	**32.9**	**28.9**	**40.0**	**38.0**
Percent of Labor Force	5.2	4.1	—	5.0	4.7
NONAGRICULTURAL JOBS	**749.8**	**724.7**	**3.5**	**741.9**	**754.2**
Mining	**8.6**	**8.8**	**-2.3**	**8.6**	**8.6**
Metal Mining	2.9	3.1	-6.3	3.0	3.1
Bituminous Coal Mining	2.4	2.5	-4.0	2.4	2.5
Oil/Gas Extraction & Quarrying*	3.2	3.1	3.3	3.2	3.0
Contract Construction	**34.0**	**31.3**	**8.6**	**32.2**	**34.1**
Manufacturing	**109.9**	**108.4**	**1.4**	**108.8**	**108.7**
Durable Goods	72.7	72.0	1.0	72.0	71.9
Primary Metals	*6.1*	*5.9*	*3.4*	*6.1*	*6.0*
Fabricated Metals, Machinery, & Computers	*13.9*	*14.3*	*-2.8*	*13.9*	*14.0*
Electrical/Electric Equipment (ex. Computers)	*11.3*	*11.8*	*-4.2*	*11.3*	*11.4*
Transportation Equipment	*17.7*	*17.9*	*-1.1*	*17.5*	*17.5*
*Lumber/Furniture,Stone/Clay/Glass**	*10.8*	*11.0*	*-1.9*	*10.6*	*10.5*
*Other Durable Goods**	*13.1*	*11.1*	*17.8*	*12.6*	*12.5*
Nondurable Goods	37.2	36.4	2.2	36.8	36.8
Food & Related Products	*12.3*	*12.2*	*0.8*	*12.1*	*12.1*
*Other Nondurable Goods**	*24.9*	*24.2*	*2.9*	*24.7*	*24.7*
Transportation, Communications, & Utilities	**43.2**	**42.6**	**1.4**	**42.9**	**43.0**
Railroad Transportation	2.5	2.4	4.2	2.5	2.5
Trucking & Warehousing	16.1	15.3	5.3	15.8	15.8
Transportation by Air*	7.0	7.0	0.0	7.0	6.9
Other Transportation & Related Services*	3.3	3.2	3.1	3.3	3.3
Communications	7.1	7.0	1.4	7.1	7.2
Electric, Gas, & Sanitary Services	7.2	7.7	-6.5	7.2	7.3
Trade	**179.8**	**174.9**	**2.8**	**177.1**	**177.9**
Wholesale Trade	39.6	39.3	0.8	39.3	38.5
*Durable Goods**	*23.0*	*23.2*	*-0.9*	*22.8*	*23.0*
*Nondurable Goods**	*16.7*	*16.2*	*3.1*	*16.5*	*16.5*
Retail Trade	140.2	135.6	3.4	137.8	138.4
Food Stores	*25.0*	*24.4*	*2.5*	*24.9*	*24.6*
Auto Dealers/Parts Stores, & Gas Stations	*16.7*	*16.2*	*1.2*	*16.5*	*16.3*
Eating & Drinking Places	*45.8*	*44.5*	*3.0*	*44.9*	*45.6*
*Home Furniture/Equipment & Clothing Stores**	*12.4*	*11.3*	*9.9*	*12.2*	*12.3*
*Gen. Merchandise/Building & Garden Supply**	*21.7*	*21.8*	*-0.5*	*21.4*	*21.5*
Miscellaneous Retail	*18.6*	*17.0*	*9.1*	*17.9*	*18.1*
Finance, Insurance, & Real Estate	**36.2**	**34.6**	**4.7**	**35.7**	**35.5**
Depository Institutions*	13.5	13.3	1.5	13.3	13.2
Other Finance/Insurance/Real Estate*	22.7	21.3	6.7	22.4	22.3
Services	**194.2**	**183.1**	**6.1**	**192.0**	**191.0**
Hotels & Lodging Places	12.9	12.5	3.3	12.7	12.8
Personal, Amusement & Recreational*	19.9	18.5	7.7	19.6	19.0
Computer-Related*	9.3	8.5	9.4	9.3	9.2
Other Business Services*	33.1	29.8	11.1	32.0	31.6
Auto Repair/Rental/Parking*	7.5	7.0	7.2	7.4	7.3
Health	48.9	46.4	5.4	48.6	48.2
Education/Social & Membership Organizations*	36.1	35.0	3.2	35.8	35.6
Legal & Miscellaneous Services	4.9	4.8	2.1	4.9	5.0
Engineering, Accounting, & Related*	14.8	14.4	2.8	14.9	15.5
Other Repair/Ag. Services & Museums, etc.*	6.7	6.2	7.9	6.8	6.8
Government	**143.7**	**140.9**	**2.0**	**144.6**	**155.4**
Federal Government	38.7	40.4	-4.1	39.7	40.0
*U.S. Defense**	*19.0*	*21.4*	*-11.1*	*19.3*	*19.4*
*Other Federal**	*19.7*	*19.0*	*3.6*	*20.4*	*20.6*
State Government	42.1	39.8	5.8	42.2	43.1
*State Education**	*21.4*	*20.3*	*5.4*	*21.6*	*22.8*
*Other State**	*20.7*	*19.5*	*6.2*	*20.6*	*20.3*
Local Government	62.9	60.8	3.5	62.7	72.3
*Public School Districts**	*35.5*	*34.3*	*3.5*	*35.4*	*46.0*
*Other Local**	*27.4*	*26.5*	*3.4*	*27.3*	*26.3*

Source: Utah Department of Employment Security, Labor Market Information Services.

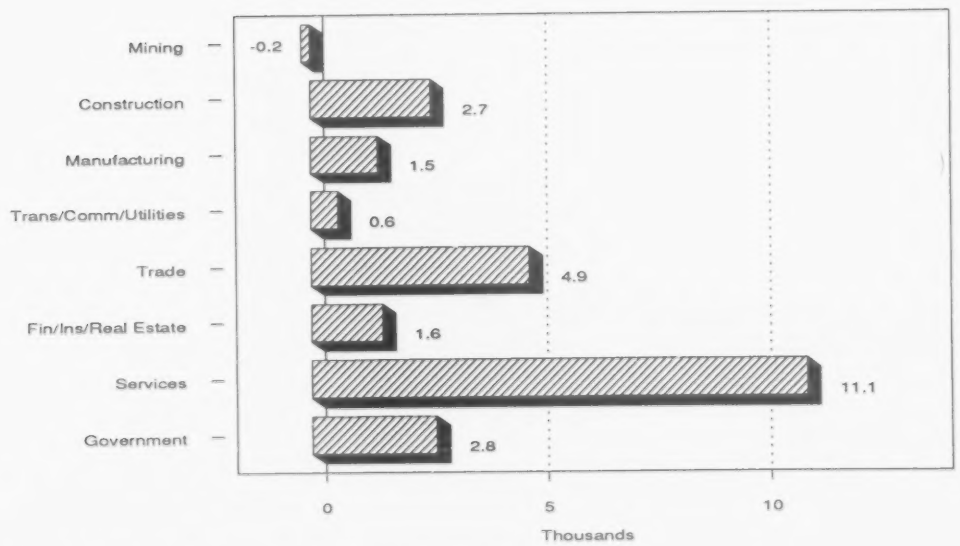
ADJUSTED

Table 2. Utah Civilian Labor Force and Nonagricultural Jobs Seasonally Adjusted *(Numbers in Thousands)*

	Aug 1991(r)	Aug 1990	Percent Change	Jul 1991(p)	Jun 1991(r)
CIVILIAN LABOR FORCE	811.7	793.7	2.3	806.1	802.2
Employed	767.9	760.8	0.9	763.8	761.7
Unemployed	43.8	32.9	33.1	42.3	40.5
Percent of Labor Force	5.4	4.1	--.--	5.2	5.0
NONAGRICULTURAL JOBS	750.7	725.8	3.4	746.9	752.0
Mining	8.9	9.1	-2.3	9.1	8.9
Contract Construction	30.5	28.0	8.6	29.8	32.0
Manufacturing	108.9	107.4	1.4	108.5	107.9
Durable Goods	72.0	71.3	1.0	71.6	71.2
Nondurable Goods	36.9	36.1	2.2	36.9	36.7
Trans., Comm., Public Utilities	42.6	42.0	1.4	42.6	43.0
Trade	178.9	173.7	2.8	177.1	177.4
Wholesale	39.2	38.9	0.8	38.9	39.2
Retail	139.4	134.8	3.4	138.2	138.2
Finance, Insurance & Real Estate	35.9	34.4	4.6	35.6	35.3
Services	194.7	183.5	6.1	192.8	192.1
Government	150.7	147.7	2.1	151.5	155.4
Federal Government	38.3	40.4	-4.2	39.2	39.4
State Government	45.0	42.6	5.8	45.2	44.1
Local Government	67.4	65.2	3.5	67.1	71.9

Source: Utah Department of Employment Security, Labor Market Information Services.

August 1990-91 Growth in Utah Nonfarm Jobs by Industry



Source: Utah Department of Employment Security, Labor Market Information Services.

Economic Events

Please note: Information contained in Economic Events is obtained from regional newspapers, local Job Service offices, trade publications, clipping services, and local area Chamber of Commerce publications.

- Piper Impact has announced that it will build a 42,000 square-foot production plan in Summit County's Silver Creek Center. Piper will produce aluminum components for Morton International's automotive safety products plants in Ogden and Brigham City. The new operation is expected to employ a year-round staff of 100 people.
- Andalex Resources, Inc., has submitted an application to open a coal mine in the Kaiparowits Plateau near Big Water. If plans are realized, the mine will be operational by 1995 and will employ 150 miners plus supportive staff. As always, environmental issues must be addressed before approval of the mine is finalized. In connection with the coal operation, the company's plans include building railroad transportation facilities near Cedar City.
- Clearfield's Associated Piping and Engineering Company is being re-opened by its founder and original owner. The large manufacturing operation, sold by the founder in 1987, closed last May, idling approximately 400 people. The re-opening will require an initial staff of 60 to 70 individuals; the plant will eventually employ more than 200 workers.
- The new Defense Logistics Agency (DLA) computer processing center, located at the Ogden Defense Depot, is expanding its operations. Department of Defense budget cutbacks are forcing military bases around the country to reduce operations, and this is creating a windfall for Ogden. Computer processing for 27 separate DLA operations are being consolidated at the Ogden Depot. It is expected that approximately 220 people will eventually work in a new 52,800 square-foot building.
- An innovative new operation is planning to join the Tooele economy. Groen Brothers Aviation is building a 50,000 square-foot manufacturing site in the Tooele Industrial Park. They will manufacture a "gyroplane." The gyroplane is a rotor-winged aircraft which can be used in law enforcement air surveillance, agricultural spraying or recreation. The company plans to employ upwards of 200 people.❐

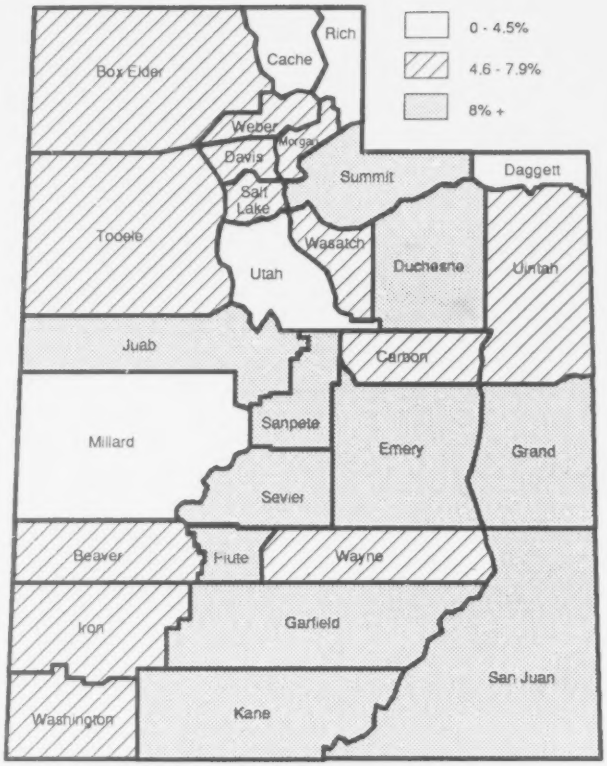
Despite rising unemployment, most counties enjoy a favorable economic climate

Unemployment rates in most of Utah's counties inched upward again in August. Nevertheless, because of continuing growth in the number of nonfarm jobs, the economic climate in most areas of the State remains upbeat.

Among the metropolitan counties, effects of the national recession have elevated the unemployment rates to levels not seen for two or three years, but these rates remain, in general, far lower than the U.S. average. However, layoffs from government installations have escalated the unemployment rates of Weber and Davis counties to new four-year highs of 6.6 and 5.1 percent respectively.

In contrast, the strength of Utah County's very rapid 7-percent job growth kept its unemployment rate in the mid 4 percent range. Salt Lake County's rate, at approximately 5 percent, remains at a respectable level.

- ***Layoffs from government defense installations have escalated the unemployment rates of Davis and Weber counties to new four-year highs of 5.1 and 6.6 percent respectively.***



Unemployment Rates August 1991

Cache County was recently designated as an "urbanized area" by the U.S. Bureau of the Census. Its economy is robust with one of the lowest unemployment rates in the State (4.4 percent) and rapid job growth (over 6 percent). The manufacturing and service industries produced most of these new jobs.

Nonmetropolitan counties are a much more diverse group. Those with larger populations, such as Washington, Box Elder, and Iron, are generally prospering. However, exceptions to this generalization are Tooele and Carbon counties which have

Continued on page 8

- ***Strong job growth in most counties offset the news of slightly higher unemployment rates.***
- ***Uintah county continues to experience rapid job growth primarily due to increased oil exploration.***
- ***Cache County was recently designated an "urbanized area" by the U.S. Bureau of the Census.***

Continued from page 7

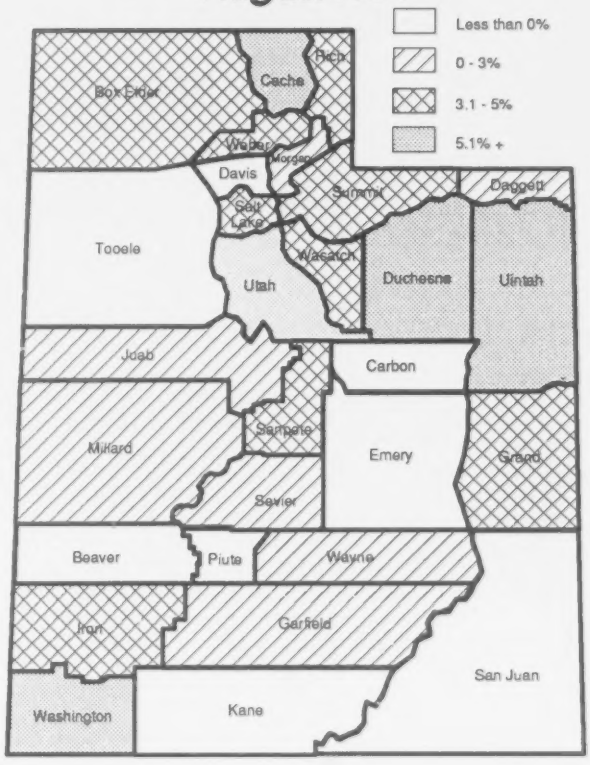
suffered layoffs in key industries; their nonfarm jobs number fewer than year-ago levels, but their unemployment rates (6.2 and 6.8 percent respectively) are still not high by U.S. standards.

Six nonmetropolitan counties—Garfield, Piute, San Juan, Emery, Sanpete, and Duchesne—have double-digit unemployment rates. But despite high unemployment, Sanpete and Duchesne counties achieved year-over job growth of 5 percent or greater.

Of particular note is Uintah County, which continues to experience rapid job growth—primarily due to increased oil exploration. Other industries contributing to this employment expansion are trade, transportation, manufacturing, and construction.❐

Kenneth E. Jensen
Labor Market Economist

Year-Over Percent Change in Nonfarm Jobs August1991



Metro Areas

Table 3. Civilian Labor Force and Nonfarm Jobs for SaltLake/Ogden and Provo/Orem Metropolitan Statistical Areas *(Numbers in Thousands)*

	Salt Lake/Ogden					Provo/Orem				
	Aug 1991(f)	Aug 1990	Percent Change	Jul 1991(p)	Jun 1991(r)	Aug 1991(f)	Aug 1990	Percent Change	Jul 1991(p)	Jun 1991(r)
CIVILIAN LABOR FORCE	**531.8**	**521.2**	**2.0**	**526.5**	**519.8**	**119.2**	**117.1**	**1.8**	**119.0**	**118.5**
Employed	504.3	500.2	0.8	499.4	495.1	113.8	113.3	0.4	113.4	113.1
Unemployed	27.5	21.0	31.0	27.1	24.7	5.4	3.8	42.1	5.6	5.4
Rate	5.2	4.0	——	5.1	4.8	4.5	3.3	——	4.7	4.5
TOTAL NONFARM JOBS	**512.1**	**498.3**	**2.8**	**508.1**	**514.1**	**98.9**	**92.2**	**7.3**	**96.7**	**99.1**
Mining	2.6	2.9	-10.3	2.6	2.7	0.1	0.1	0.0	--	--
Construction	24.0	22.1	8.6	22.7	23.9	3.5	3.2	9.4	3.4	3.8
Manufacturing	70.5	70.6	-0.1	69.9	70.0	14.3	13.9	2.9	14.3	14.2
Durable	49.0	49.1	-0.2	48.4	48.5	8.6	8.7	-1.1	8.7	8.5
Nondurable	21.5	21.5	0.0	21.5	21.5	5.7	5.2	9.6	5.6	5.7
Trans/Comm/Utilities	33.7	33.2	1.5	33.5	33.4	2.5	2.5	0.0	2.5	2.6
Trade	123.5	122.6	0.7	122.1	122.7	24.7	22.2	11.3	24.0	24.1
Wholesale	30.9	31.5	-1.9	30.6	30.9	5.4	4.5	20.0	5.4	5.3
Retail	92.6	91.1	1.6	91.5	91.8	19.3	17.7	9.0	18.6	18.8
Fin/Ins/Real Estate	29.9	28.5	4.9	29.6	29.4	2.4	2.3	4.3	2.4	2.4
Service	132.8	124.9	6.3	131.3	131.0	36.8	34.2	7.6	36.1	35.9
Government	95.1	93.5	1.7	96.4	101.0	14.6	13.8	5.8	14.0	16.1

Source: Utah Department of Employment Security, Labor Market Information Services.

By County

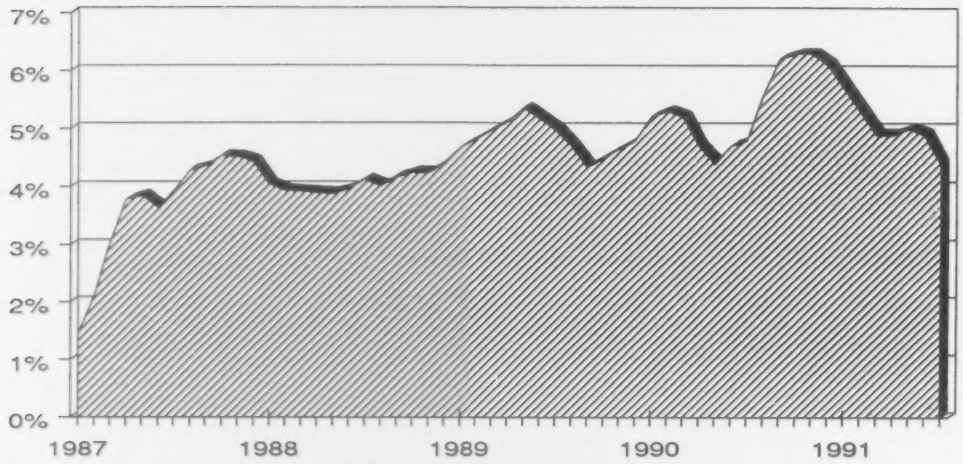
Table 4. Unemployment Rates and Nonfarm Jobs in Utah by County

	Seasonally Adjusted Unemployment Rate				Nonfarm Wage and Salary Jobs				
	Aug 1991(f)	Jul 1991(p)	Jun 1991(r)	Aug 1990	Aug 1991(f)	Aug 1990	Percent Change	Jul 1991(p)	Jun 1991(r)
STATE TOTAL	**5.4**	**5.2**	**5.0**	**4.1**	**749,800**	**724,660**	**3.5**	**741,900**	**754,200**
Bear River	**4.7**	**4.2**	**4.5**	**3.6**	**44,820**	**42,450**	**5.6**	**44,230**	**46,030**
Box Elder	5.3	4.3	5.1	4.2	15,820	15,260	3.7	15,790	15,820
Cache	4.4	4.2	4.2	3.3	28,750	26,780	6.7	28,000	29,740
Rich	2.7	2.8	3.2	1.9	430	410	4.9	440	470
Wasatch Front	**5.2**	**5.2**	**4.8**	**4.1**	**522,960**	**509,980**	**2.5**	**518,990**	**525,120**
Wasatch Front North	**5.9**	**5.7**	**5.1**	**4.9**	**130,740**	**128,640**	**1.6**	**129,720**	**131,470**
Davis	5.1	5.0	4.7	4.2	61,640	61,620	0.0	61,180	61,230
Morgan	6.9	7.6	6.4	5.5	1,050	1,020	2.9	1,030	1,050
Weber	6.6	6.3	5.5	5.7	68,050	66,000	3.1	67,510	69,190
Wasatch Front South	**4.9**	**5.0**	**4.9**	**3.7**	**392,220**	**381,340**	**2.9**	**389,270**	**393,650**
Salt Lake	4.9	5.0	4.6	3.6	382,500	370,650	3.2	383,700	383,700
Tooele	6.2	6.0	6.1	5.1	9,720	10,690	-9.1	9,780	9,950
Mountainland	**4.9**	**4.9**	**4.9**	**3.5**	**109,270**	**102,230**	**6.9**	**106,630**	**108,780**
Summit	8.1	6.6	6.5	5.5	7,510	7,210	4.2	7,270	7,150
Utah	4.5	4.7	4.7	3.3	98,980	92,330	7.2	96,610	98,980
Wasatch	6.8	6.9	7.2	6.2	2,780	2,690	3.3	2,750	2,650
Central	**7.8**	**7.7**	**7.7**	**6.1**	**15,520**	**15,090**	**2.8**	**15,440**	**15,980**
Juab	8.5	8.1	5.9	5.4	1,860	1,850	0.5	1,840	1,810
Millard	4.5	4.8	5.2	4.2	3,630	3,550	2.3	3,550	3,640
Piute	12.1	13.7	16.4	10.7	200	200	0.0	210	200
Sanpete	10.1	9.4	9.4	8.4	4,050	3,860	4.9	4,100	4,460
Sevier	8.0	7.6	8.0	4.9	5,200	5,060	2.8	5,170	5,250
Wayne	6.7	8.5	8.0	9.7	580	570	1.8	570	620
Southwestern	**6.3**	**5.4**	**5.2**	**4.7**	**28,490**	**27,260**	**4.5**	**28,300**	**28,670**
Beaver	5.6	3.8	3.6	8.4	1,350	1,350	0.0	1,360	1,350
Garfield	15.3	11.9	15.0	9.6	1,770	1,740	1.7	1,760	1,760
Iron	5.2	4.9	4.2	3.7	7,800	7,470	4.4	7,760	7,940
Kane	9.7	8.0	7.4	7.5	1,740	1,790	-2.8	1,730	1,730
Washington	5.8	5.2	4.8	4.1	15,830	14,910	6.2	15,690	15,890
Uintah Basin	**7.9**	**8.0**	**7.1**	**6.9**	**11,730**	**10,640**	**10.2**	**11,560**	**12,370**
Daggett	2.5	2.7	2.9	1.8	410	400	2.5	430	400
Duchesne	10.0	8.5	9.0	8.5	3,870	3,630	6.6	3,870	3,940
Uintah	7.1	8.1	6.3	6.3	7,450	7,580	12.7	7,260	7,170
Southeastern	**8.6**	**8.2**	**8.2**	**6.4**	**16,820**	**17,020**	**-1.2**	**16,750**	**17,260**
Carbon	6.8	7.8	7.6	5.2	7,460	7,580	-1.6	7,440	7,500
Emery	10.3	7.3	9.3	7.5	3,480	3,640	-4.4	3,490	3,450
Grand	8.6	7.2	8.1	7.5	2,740	2,640	3.8	2,780	2,790
San Juan	10.6	10.8	8.4	7.1	3,140	3,160	-0.6	3,040	3,520
Salt Lake/Ogden MSA	**5.2**	**5.2**	**4.7**	**4.0**	**512,190**	**498,270**	**2.8**	**508,180**	**514,120**
Provo/Orem MSA	**4.5**	**4.7**	**4.7**	**3.3**	**98,980**	**92,330**	**7.2**	**96,610**	**98,980**

Source: Utah Department of Employment Security, Labor Market Information Services.

Note: Seasonally adjusted unemployment rates should not be used for federal or state funding applications.

Year-over Percent Increase in U.S. Consumer Price Index



Source: U.S. Department of Labor, Bureau of Labor Statistics.

PRICES

Table 5. Current U.S. Price Indexes

	INDEX		% CHANGE FROM	
	Jul 1991	Jul 1990	Prior Year	Prior Month
CONSUMER PRICES (1982-84=100)				
ALL ITEMS (CPI-U[1])	**136.2**	**130.4**	**4.4**	**0.1**
Food and Beverages	137.1	132.4	3.5	-0.4
Food at Home	136.0	132.5	2.6	-1.0
Housing	134.2	129.2	3.9	0.6
Rent Residential	143.7	138.7	3.6	0.5
Fuel and Other Utilities	116.4	111.3	4.6	0.5
Medical Care	177.5	163.5	8.6	0.7
Apparel and Upkeep	125.2	120.8	3.6	-1.3
Transportation	123.4	118.4	4.2	-0.2
Gasoline	98.2	94.4	4.0	-2.4
Energy[3]	102.7	99.8	2.9	-0.8
PURCHASING POWER OF CONSUMER DOLLAR: (1982-84 = $1.00)	**$0.734**	**$0.767**	**-4.3**	**-0.1**
ALL ITEMS (CPI-W[2])	**134.3**	**128.7**	**4.4**	**0.1**
PRODUCER PRICES (1982 = 100)				
ALL COMMODITIES	**116.0**	**114.3**	**1.5**	**-0.3**
Finished Goods	121.6	118.2	2.9	-0.2
Intermediate Materials	114.0	113.1	0.8	-0.3
Crude Materials	94.4	101.4	-6.9	-5.1

1 Consumer Price Index—All Urban Consumers.

2 Consumer Price Index—Urban Wage Earners and Clerical Workers.

3 Energy is a special group index consisting of prices paid for the following: fuel oil, coal, bottled gas, electricity, gasoline, and motor oil and coolant. It is not one of the components of the "All Items" as its subcomponents are already included.

Source: U. S. Department of Labor, Bureau of Labor Statisitcs.

Job Service

Table 6. Employment Security Activities in Utah

	Aug 1991(p)	Aug 1990	Percent Change	Jul 1991
Nonfarm Jobs Available	18,649	23,565	-20.9	19,155
New Applications for Jobs	11,946	10,758	11.0	10,918
Total Nonfarm Job Placements	7,169	7,769	-7.7	6,170
Initial Claims	1,063	1,016	4.6	1,401
Weeks Claimed	9,079	6,923	31.1	8,885
Insured Unemployment Rate	1.24	0.99	—	1.26
Benefits Paid (Monthly)	$4,193,951	$3,745,489	12.0	$5,702,295

Note: All claims data include Regular UI, UCFE, and UCX claims only and are listed for the week containing the 15th day of the month.

Source: Utah Department of Employment Security, Labor Market Information Services.

Drugs in the Work Place

A recent article in the Bureau of Labor Statistics' *Monthly Labor Review* indicates that data from the National Longitudinal Survey of Youth reveals that drug and alcohol use in the workplace is more common among men than women. The National Longitudinal Survey of Youth is an ongoing study of the labor market experiences of individuals born between 1957 and 1964. It contains an overrepresentation of blacks, Hispanics, and economically disadvantage whites.

The study revealed the incidence of drug use on the job among 19 to 27 year olds was 7 percent in 1984. White men aged 19 to 23 reported the highest frequency of workplace drug use. Reported drug use was higher among whites than minorities, and higher among 19 to 23 year old workers than those between the ages of 24 and 27. Blue-collar workers showed higher rates of drug use than white-collar workers. Researchers found drug use to be highest among young workers in the entertainment/recreation and construction industries and least common among those in professional services and public administration.

When each industry was classified by occupation, data showed that transportation industry operators had a relatively high rate of workplace drug use—which is notable in light of recent tragic transportation accidents attributed to drug/alcohol use. The report states that many of the occupations/industry groups with high rates of reported on-the-job drug use are those in which either public or worker safety could be threatened by the use of illicit drugs.

The Bureau of Labor Statistics estimates that in 1988 30 percent of all workers had access to Employee Assistance Programs which identify and provide treatment to substance abusers.

Approximately 9 percent of all workers aged 19 to 27 believed that drinking had "interfered with work on a job." Men reported having alcohol interfere with their work at nearly twice the rate of women. The rate for white workers was much higher than that of blacks, but lower than that of Hispanics.

Young workers in the two industries which had a relatively high incidence of drug use (construction and entertainment/recreation) also had a relatively high rate of on-the-job alcohol use.❐

Hours and Earnings

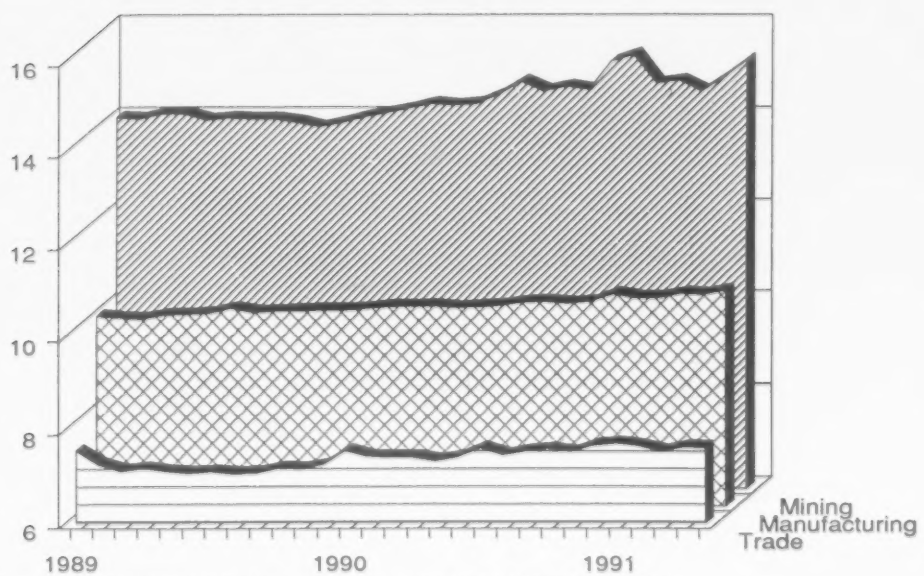
Table 7. Hours and Earnings of Production Workers in Utah

	Average Hourly Earnings				Average Weekly Hours			
	Jul 1991(p)	Jul 1990	% Chng	Jun 1990(r)	Jul 1991(p)	Jul 1990	% Chng	Jun 1990(r)
MINING	**14.80**	**14.82**	**-0.1**	**14.74**	**43.8**	**45.0**	**-2.7**	**45.0**
Metal Mining	13.72	12.63	8.6	13.60	49.5	48.8	1.4	46.9
Bituminous Coal Mining	17.22	17.98	-4.2	17.18	40.7	43.3	-6.0	44.8
MANUFACTURING	**10.67**	**10.30**	**3.6**	**10.71**	**39.3**	**39.6**	**-0.8**	**40.1**
Durable Goods	10.84	10.54	2.8	10.93	39.5	40.1	-1.5	39.8
Primary Metals	13.79	12.91	6.8	13.27	38.5	39.3	-2.0	39.9
Fabricated Metal Prod. and Mach.	10.31	9.85	4.7	10.49	39.8	40.9	-2.7	40.7
Transportation Equipment	13.21	13.37	-1.2	13.44	39.7	40.9	-2.9	40.1
Nondurable Goods	10.34	9.81	5.4	10.29	38.9	38.7	0.5	40.8
Food and Kindred Products	9.26	8.81	5.1	9.38	40.1	40.6	-1.2	43.6
TRADE	**7.73**	**7.41**	**4.1**	**7.68**	**29.5**	**30.3**	**-2.6**	**29.3**
Wholesale	10.52	10.35	1.6	10.49	39.4	38.7	1.8	37.9
Retail	6.66	6.56	1.5	6.64	26.9	27.9	-3.6	27.1
Food Stores	6.87	6.23	10.3	6.58	26.4	26.1	1.1	26.3
General Merchandise	6.22	6.15	1.1	6.22	29.0	28.8	0.7	27.2

Note: Average hours include hours actually worked or remunerated. Average hourly earnings include incentive and premium pay. Data may be affected by labor disputes.

Source: Utah Department of Employment Security, Labor Market Information Services. Prepared in conjunction with the U.S. Department of Labor, Bureau of Labor Statistics.

Average Hourly Wage for Selected Industries



Source: Utah Department of Employment Security, Labor Market Information Services

Do You Use Tests? Are They Worth Anything?

Tests are coming under increasing scrutiny. How accurate are they at predicting job performance?

Editor's Note: This article was originally published in 1964. However, given the current interest in testing for placement purposes and "race norming," this discussion is as relevant today as it was 27 years ago.

Who Uses Tests?

It can be assumed that the proportion of companies that would report they are using tests would still be fairly low today. For example, in a recent survey of state employees in Utah, we found that only 13 percent of non-merit employees were given "tests" before they were hired, while even among the merit employees only 56 percent had been required to take "tests". I put the word tests in quotes, because in doing this survey, we found that the going jargon was to use the word "examination" instead of tests—and that further, there were various kinds of examinations being used in state employment procedures. There were written examinations, performance examinations, oral examinations, unassembled examinations, open examinations, etc. Hence, the above percentages refer to written examinations only. Is this what "tests" mean in your organization, too?

What is a Test?

There are psychologists (and I am one of them) who would maintain that in the broad sense any tool used in personnel decision making is a test. Is this quibbling with a word? I don't think so. Any

- *Many of the arguments against written examinations as used in the industrial setting are actually arguments against one particular form of examination—the personality test.*
- *To be rationally sound, an evaluation must be based on more than a limited number of personal examples.*
- *The proof of the worth of any form of decision-making is in the results—results that are free from over-generalizations based on limited examples, and free from other confounding factors.*
- *When scientific procedures have been applied to the tools used by a variety of businesses, many interviews have been proved useless and so have many written personality tests. Tests of mental ability, tests of skills, and the biographical data of application blanks have proved to be more useful.*
- *Each company ought to find out for itself, and not readily accept the generalizations based on other companies or on limited samples.*

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systematic procedure for comparing individuals can be called a test. If so, then the question, "Do you use tests?" must he answered in the affirmative by nearly every company. And the question, "Are they worth anything?" applies to all "they". Why should we evaluate written examinations differently than any of the tools we use? Every tool that is used to compare individuals should be subject to periodic evaluation whether it be our interviews or our application blanks.

Yet, for some reason, it is that particular test, the written examination, which is subjected to the most evaluation, both criticism and praise. The spokesmen on this subject are very verbal. Their articles and speeches make for good emotional experiences in reading and listening.

"Con" Artists

Of the "con" artists, those who argue against "tests", consider William Whyte and his obvious distaste for tests as evidenced in his articles on "How to Cheat on Personality Tests" and "The Fallacies of Personality Testing." Or, consider Senator Barry Goldwater and his proposal to prohibit Federal funds for many kinds of testing.

"Pro" Artists

There are also the "pro" artists, particularly those who write glowing descriptions of the "tests" they have to sell. It would also appear that national merit scholarships are being awarded on the assumption that "tests" are the answer to the school administrator's prayers.

Yet, I personally feel that even in this limited arena of dispute both sides have often failed to properly evaluate the worth of "tests". Their arguments may be emotionally stirring, but they are often logically sterile. For example, many of the arguments against written examinations as used in the industrial setting are actually arguments against one particular form of examination, the personality test. This is the kind of test that Whyte was mainly debunking; yet, by inference or implication, the criticism gets spread to all written examinations. This sort of blanket condemnation is not very logical. Further, this criticism is often based on a rather limited number of examples where the test scores do not seem to fit the employees or executives tested. To be rationally sound, an evaluation must be based on more than a limited number of personal examples.

The Arguments

This same sort of error is also found in the arguments in favor of using tests. Stagner once demonstrated this fallacy quite pointedly. He was the guest expert at a conference of personnel managers. He asked each manager to fill out a personality inventory, a legitimately published personality test. After collecting the tests and scoring them, Stagner returned to each manager the next day a description of his personality.

He then asked each manager to privately indicate in the margin beside each description sentence how well the sentence described his own personality. After collecting this evaluation of the worth of, or the accuracy of, the personality description given to each manager, Stagner found that the managers felt these descriptions were for the most part "amazingly accurate".

Then, to the consternation of the managers, he announced that he had never scored the tests, that each person had received an identical personality description, and that these descriptions were nothing but glittering generalities taken from dream books and astrology charts. Again, how illogical a person can

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be who evaluates a test as being good merely because it seems to fit his conception of himself. To be rationally sound, an evaluation must be based on more than a limited number of personal examples.

The proof of the worth of any form of decision-making is in the results—results that are free from over-generalizations based on limited examples, and free from other confounding factors. So one must logically, even scientifically, prove the worth of not only written examinations but also interviews, application blanks, letters of recommendations, and the applicant's past experience.

Proof?

But, what then is the nature of logical and/or scientific proof? And, what are results that are free from "other confounding factors?" We all have some sort of feel for the nature of science and a freedom from confounded results. For instance, we would naturally assume that a medical scientist would use sugar pills (placebos) along with real pills in testing the worth of a new drug. We are aware that some patients can improve after the administration of any pill, even a sugar one, so that a drug study could be confounded with "psychological cures" if some patients were not also given placebos. Sometimes, however, we believe in results that are not free from confounding.

Consider the results of studies in "sleep learning." Can one learn material played by a recorder while he is sleeping? Careful studies indicate that if learning does occur, it does so while the person is partly or completely awake. Thus the reported results of sleep learning have usually been confounded by not making sure that the person was sound asleep. What has been proved, apparently, is that people can learn while they are in bed—and this hardly needed to be proved.

Or, consider the reported results of cigarette smoking and lung cancer. How much are these results confounded by filter versus nonfilter cigarettes, by other air pollution, by income level, or by bodily dispositions related to both smoking and cancer? We must take the same precautions in concluding that our personnel decision-making tools produce certain results in improved employee efficiency or reduced costs.

Follow the Steps

To scientifically validate, or prove the worth of these tools, certain steps should be followed. Say you are considering the installation of a new tool for screening applicants for a certain job.

- (1) What is the nature of the job? Can you get some useful or reasonable hunches (hypotheses) about what kinds of skills or aptitudes you should look for in applicants? Are these traits measurable by the new tool you have in mind?
- (2) How can you measure the success of persons who perform this job? Your prediction of an applicant's success can be no better than your ability to measure his success once he is on the job.
- (3)How well are you currently doing with your existing tools in predicting success on this job? That is, what percentage of the present employees on this job are successful? For example, if you are already satisfied with 80 percent of the people you have hired for the job, you will probably have a hard time adding a new tool that will improve this situation.
- (4) Apply the proposed new tool to the present employees and see how many of them you would have hired.

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Would this tool have improved your rate of success? There are at least two ways to assess this possibility of improvement.

One is a method outlined by Taylor and Russell and described in Joseph Tiffin's book on industrial psychology. It uses (a) your present success ratio (step 3 above), (b) your selection ratio (i.e., the number of openings you have in comparison to the number of applicants), and (c) the degree of agreement (correlation) between the present employee's success and his performance on the new tool.

As a result, this method predicts what percentage of your employees would be successful if you started using the new tool. This can then be compared to your present success ratio, which was accomplished without using the new tool.

A second method uses Bayes' theorem, an old and familiar device to statisticians if you happen to have one around to consult.

- (5) If the proposed new tool passes the above four steps, then start using it on your new applicants, but don't let it yet affect your decisions. Just file the results away and wait until the new hires have had a chance to be evaluated on the job.
- (6) After the new hires have been evaluated (see step 2), then get out the results of their performance on the new tool and see if using it would have improved your selection success.
- (7) If the proposed new tool still looks good, then start including it in your hiring decisions.
- (8) Keep checking up on your decision-making tools every year or so to make sure that the situation hasn't changed. Now that may seem like a lot of work, particularly if you apply these steps to all your tools, but if you really want to answer the initial question, "Are they worth anything?", this will keep your scientific hands clean.

Find Out for Yourself

When procedures like these have been applied to the tools used by a variety of businesses, many interviews have been proved useless and so have many written personality tests. Tests of mental ability, tests of skills, and the biographical data of application blanks have proved to be more useful. However, each company ought to find out for itself and not readily accept the generalizations based on other companies or on limited samples.

Are They Ethical?

So far in this discussion I have avoided one current criticism typically leveled at written examinations. Is the use of written examinations ethical—is it an unwarranted invasion of individual privacy? You have probably heard this question raised. I do not feel that I can answer it for you—except to say that this question can be leveled at all personnel decision-making tools. I cannot see that written examinations are uniquely guilty. Even the time honored selection interview can get pretty nosey.

To me the "sin" involved in personnel decision-making tools is the use of them without proof of their worth. To reject an applicant because of his performance on a written test, in an interview, on the application blank, etc.—without evidence that the tool is really valid in your company—is unethical in my opinion.

And, so we are back where we started. I would say that you undoubtedly do use "tests" in your present selection procedures. Whether they are worth anything is for you to determine.❐

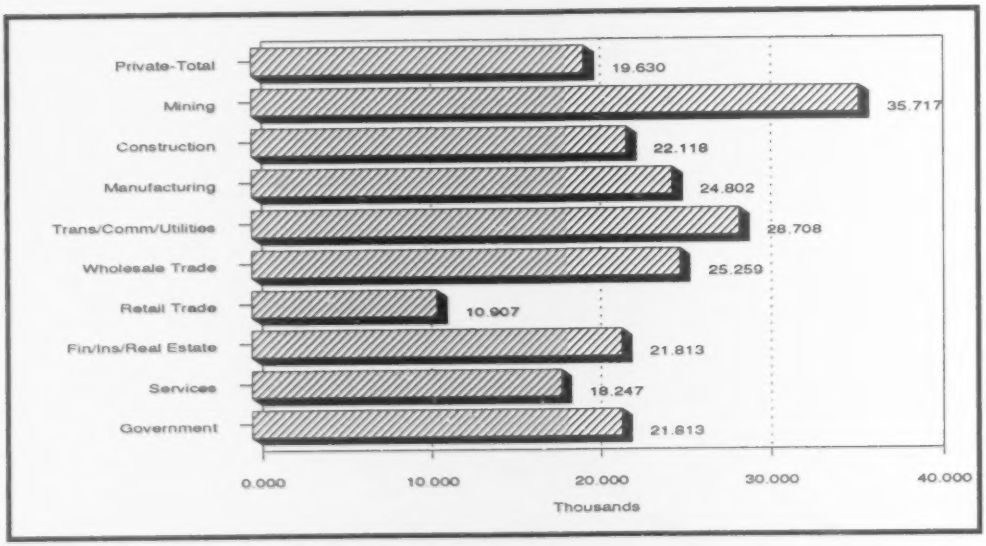
Dr. Oakley Gordon
(published in *Personnel Administrator*)

We've Moved. . .

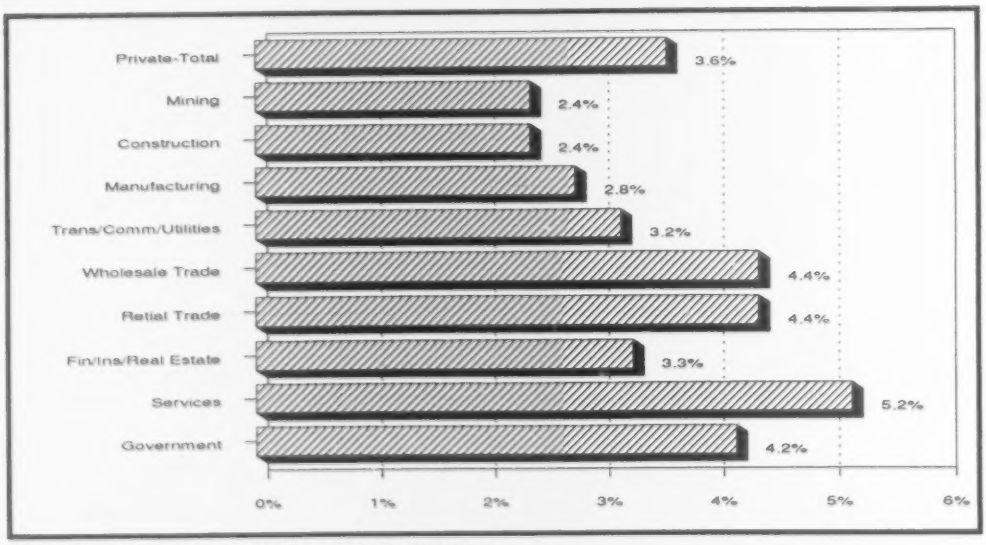
The Labor Market Information Services Section of the Utah Department of Employment Security has moved to a new building. LMI Services are now located at ***140 East 300 South****—adjacent to the Heber Wells State Office Building. Please continue to send mail to our current Post Office Box Number.*

Accordingly, phone numbers for LMI staff have changed. If you need to contact us, please call (801) 536-7800.❐

Utah Average Annual Pay by Industry 1990



Percent Change in Utah Average Annual Pay 1989-90



Source: U.S. Department of Labor, Bureau of Labor Statistics.

The Glass Ceiling Initiative

What is the "glass ceiling?" The U.S. Department of Labor concludes that the glass ceiling is most clearly defined as those artificial barriers based on attitudinal or organizational bias that prevent qualified individuals from advancing upward in their organization into management-level positions. The Glass Ceiling Initiative set out to investigate whether the glass ceiling existed, what were the causes, and how the problem (if any) could be fixed.

As part of the Initiative, nine *Fortune* 500 establishments were selected randomly for review in a pilot study. The companies represented a broad range of products and services and were located in five of the Department's 10 regions. The reviews were conducted by senior officials from the national and regional offices of the U.S. Department of Labor.

The findings?

- Of the 147,179 employees at these companies, women represent 37.2 percent of all employees and minorities represent 15.5 percent.
- Of the 147,179 employees, 22 percent were in all levels of management , from the supervisor of a clerical pool to the CEOs and Chairmen. Of this number, 16.9 percent are women and 6.0 percent are minorities.
- Of 4,491 Managers at the executive-level (defined as assistant vice president and higher rank or their equivalent), 6.6 percent are women and 2.6 percent are minorities.

Despite the vast differences that existed between the companies in terms of organizational structure, corporate culture, business sector and personnel policies, several general findings applied to all nine.

- If there is not a glass ceiling, there certainly is a point beyond which minorities and women have not advanced in some companies.
- Minorities have plateaued at lower levels of the workforce than women.
- Monitoring for equal access and opportunity, especially as managers move up the corporate ladder to senior management levels where important decisions are made, was almost never considered a corporate responsibility or part of the planning for developmental programs and policies.
- Appraisal and total compensation systems that determine salary, bonuses, incentives and perquisites for employees were not monitored.
- Placement patterns were consistent with research data.
- There was a general lack of adequate records.

The pilot study identified the following additudinal and organizational barriers:

- Recruitment practices involving reliance on word-of-mouth and employee referral networking; the use of executive search and referral firms in which affirmative action/EEO requirements were not made known.
- Developmental practices and credential-building experiences, including advanced education, as well as career enhancing assignments such as to corporate committees and task forces and special projects—which are traditional precursors to advancement—were often not as available to minorities and women.
- Accountability for Equal Employment Opportunity responsibilities did not reach to senior-level executives and corporate decision-makers.❐

Electronic Bulletin Board Service

We are continuing to add data to our electronic bulletin board service! You can access employment, unemployment, affirmative action, and consumer/producer price indices at the touch of personal computer button. The service is free and can be accessed via a statewide "800" number. Contact Dwight Norris at (801) 536-7835 for more information.❐

Data Definitions

(f)—forecast.

(p)—preliminary.

(r)—revised.

Salt Lake/Ogden Metropolitan Statistical Area (MSA)—Salt Lake, Davis, and Weber counties.

Provo/Orem Metropolitan Statistical Area (MSA)—Utah County.

Employed Persons—Civilians who did any work as paid employees, worked more than 15 hours as unpaid workers in a family business, or were temporarily absent from work because of illness, bad weather, vacation, labor-management disputes. Each person is counted only once.

Unemployed Persons—Civilians who had no employment, were available for work, and made specific efforts to find work sometime during the prior four weeks. Persons waiting to be recalled to a job or waiting to report for a new job within 30 days need not be looking for work to be classified as unemployed.

Civilian Labor Force—Employed persons plus unemployed persons. Individuals are counted by place of residence.

Unemployment Rate—Unemployed persons as a percentage of the civilian labor force.

Nonfarm Employment—A count of jobs by place of work for the pay period including the 12th of the month. Excludes proprietors, the self-employed, unpaid/volunteer workers, military personnel, Central Intelligence Agency employees, and employees of the National Security Agency. Includes salaried officers of corporations.

Production and Related Workers—Includes working supervisors and all nonsupervisory workers closely associated with the production process.

Average Weekly Hours—The average hours for which pay was received during the pay period including the 12th of the month. Includes paid holidays, vacations, and sick leave.

Average Weekly Earnings—Includes hourly and incentive pay and is reported before deductions. Includes pay for overtime, holidays, vacation, and sick leave.

Initial Claims—Requests by individuals following a period of unemployment to determine entitlement to compensation under unemployment compensation laws .

Weeks Claimed—Requests for weekly unemployment insurance benefits filed by claimants.

Insured Unemployment Rate—The ratio of (1) the number of weeks claimed by individuals under the unemployment compensation program to (2) average employment covered by the program.

Reserve Fund Balance—Amount of funds available in the State's Unemployment Compensation Trust Fund to pay unemployment compensation benefits.

Utah Labor Market Report

Floyd G. Astin, Administrator

William R. Horner, Director, Labor Market Information Services

Lecia Parks Langston, Chief Economist

The Utah Labor Market Report is published by the Labor Market Information Services Division of the Utah Department of Employment Security, 140 East 300 South, Salt Lake City, Utah. To order this publication, call (801) 536-7812.

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